

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO**

**ERNESTINE YAZZIE AS WRONGFUL
DEATH PERSONAL REPRESENTATIVE
OF CARLOS THOMAS YAZZIE, DECEASED,**

Plaintiffs,

v.

No. CIV 19-518 JB/KK

UNITED STATES OF AMERICA,

Defendants.

DECLARATION OF BRANDON J. WARRICK, M.D.

I, Brandon J. Warrick, make the following declaration pursuant to 28 U.S.C. § 1746:

1. I am a medical doctor in Albuquerque, New Mexico, where I have been practicing for over 6 years.

2. I received my Doctor of Medicine from the University of South Dakota School of Medicine (2005), and served my emergency medicine residency at Detroit Receiving Hospital (2005-2008). In addition, I served a post-doctoral fellowship in Medical Toxicology (March 2010-February 2012).

3. I am currently a Tenured Associate Clinical Professor for Emergency Medicine Residency at the University of New Mexico (UNM), School of Medicine & College of Pharmacy, since 2014, and was an Assistant Clinical Professor for Emergency Medicine & Medical Toxicology at Wayne State University, School of Medicine, from 2010-2014.

4. I currently serve as the Associate Medical Director of New Mexico Poison Center, New Mexico College of Pharmacy, UNM (2014-present), and as an Associate Clinical Professor

at UNM, Department of Emergency Medicine. I have an academic and clinical responsibilities in Addiction Medicine through the Department of Psychiatry.

5. My experience includes Attending Physician, Department of Emergency Medicine, McLaren Greater Lansing, Lansing, MI (2013-2014); Assistant Medical Director, Department of Emergency Medicine, MidMichigan Medical Center, Alma, MI (2012-2014); Attending Physician, Department of Medical Toxicology, Detroit Medical Center, Detroit, MI (2012-2014); Attending Physician, Department of Emergency Medicine, Henry Ford Brownstone, Brownstone, MI (2009-2012); Attending Physician, Department of Emergency Medicine, Henry Ford Wyandotte, Wyandotte, MI (2008-2012); Attending Physician, Department of Emergency Medicine, St. Joseph Mercy Livingston Hospital, Howell, MI (2008-2009); Attending Physician, Department of Emergency Medicine, John D Dingell VA Medical Center, Detroit, MI (2008).

6. I was asked to review the medical files of decedent Carlos Yazzie, to assess the cause of his death on January 11, 2017, and to opine on whether his death was foreseeable and whether it could have been prevented.

7. My report, attached, sets forth my conclusions and opinions in that regard, based on the information I reviewed as described in my report. I have personal knowledge of the contents of the report and am prepared to testify at trial (if necessary) consistent with the observations and opinions set forth therein.

I state under penalty of perjury that the foregoing is true and correct.

Dated this 3 day of September, 2020.



BRANDON J WARRICK, M.D.
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Doctor's License No. #MD2014-0013 (NM)

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

ERNESTINE YAZZIE AS WRONGFUL
DEATH PERSONAL REPRESENTATIVE
OF CARLOS THOMAS YAZZIE, DECEASED,

Plaintiff,

vs.

UNITED STATES OF AMERICA,

No. CIV 19-518 SCY/KK

Defendant.

CERTIFICATE OF SERVICE OF DEFENDANT'S EXPERT DISCLOSURE

Defendant United States of America hereby certifies that on April 15, 2020, Defendant's Expert Disclosure in compliance with FED. R. CIV. P. 26 (a)(2)(B) were served by first-class mail on the following counsel of record:

Forrest G. Buffington
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Respectfully submitted,

JOHN C. ANDERSON
United States Attorney

/s/ Cassandra Casaus Currie 4/15/20
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Report of Brandon J. Warrick, MD
In the matter of *Ernestine Yazzie v. United States*, 19cv518 JB/KK

Reviewed Material:

- OMI Report
- San Juan Regional Medical Records
- Indian Health Services medical records
- Orthopedic Records
- NDPS Final Disposition Report No. 2-17-001125
- NNPD Incident Report No. 02-17-001099
- CO CHarris Written Statement
- CO RYazzie Written Statements

Summary of Reports

OMI Report:

Mr. Carlos Yazzie was pronounced dead on January 11, 2017 at 7:38 AM in his cell. Mr. Yazzie was placed into his cell on January 11, 2017 at 1:15 AM. On autopsy, Mr. Yazzie was found to have dilated cardiomegaly (520g), steatohepatitis and cirrhosis of the liver, obesity (BMI 32.73), scattered abrasions and contusions of the head, and his brain and lungs had increased fluid. OMI has no comment regarding the post-op changes to the right foot regarding new injury, infection, non-union of the foot bones, etc. Blood toxicology done was NMS Labs “Expanded Panel” and was remarkable for a blood ethanol concentration of 0.361 g/100mL and caffeine. The cause of death was ruled secondary to acute alcohol intoxication and manner of death accident.

NNPD Incident Report No. 02-17-001099:

Reports police were dispatched on January 11, 2017 at 0010 to the Yazzie residence for fighting. Shiprock police were made aware of a bench warrant for Mr. C. Yazzie. Ernestine Yazzie reported coming home and finding Mr. C. Yazzie being aggressive with Mr. Blackie. She also reported that Mr. Yazzie becomes violent towards her when he has been drinking. Mr. Yazzie was found in a broken down car outside the home when police arrived. Mr. Yazzie was described as having “blood shot eyes, slurred speech, and odor of intoxicating liquor.” Mr. Yazzie was also “verbally aggressive.” Mr. Yazzie tripped but did not fall going back to the police cars. There was also a reported exchange about putting shoes on Mr. Yazzie. The report describes Mr. Yazzie’s foot as “no swelling or open wounds.” “Compared the right foot to the left, no deformity was noted.” Police brought Mr. Yazzie’s shoes and crutches. Mr. Yazzie was described as refusing to walk because of foot pain as opposed to alcohol, and reportedly was standing on his right foot. While inside the Police Unit, Mr. Yazzie “became verbally disorderly by yelling and tossing his weight inside the Police Unit.” At the jail, Correction Officer R. Yazzie informs Mr. Yazzie he would be transported by Corrections if he continued to request for medical attention and Mr. Yazzie stated “I thought I’d ask to get out of jail time.” The report closes with Mr. Yazzie walking unassisted to his cell.

San Juan Regional Medical Records:

Mr. Yazzie was well known to San Juan Regional Medical Center (SJRMC) with many visits primary to the emergency department (ED) in the year and years prior to his death. The frequency of visits increase as the date of death became closer. Mr. Yazzie is noted to have a history of alcohol use disorder and having complications associated with alcohol going back years.

The most recent visits to SJRMC were on 1/7/17, 12/31/16, 12/3/16 for suspected infected foot status-post surgery. On the visit on 1/7/17, Mr. Yazzie complained of foot pain. The following diagnostic tests were ordered: sedimentation rate (sed rate), complete blood count (cbc), c-reactive protein, doppler ultrasound, and x-ray of the foot. The blood tests were within acceptable limits, the ultrasound (US) was negative for deep venous thrombosis (DVT), and x-rays showed hardware in place. The history and physical (H&P) does not discuss alcohol, including intoxication, impairment, or withdrawal. Mr. Yazzie was discharged without any treatment for alcohol use. On 12/31/16, Mr. Yazzie was seen by Dr. Eric Ketchem at SJRMC. Mr. Yazzie was asking to be evaluated for foot pain from the sobering house. Dr. Ketchem's note reports Mr. Yazzie to be "intoxicated" and had a serum alcohol of 0.417 g/100mL. Nursing notes report slurring speech and identifies problem with personal hygiene. The patient is discharged from the ED within three hours of presentation with antibiotics for his foot. No further testing or treatment is performed for the elevated alcohol level. On 12/3/16, Mr. Yazzie is noted to have surgical pins in place and told to be non-weight bearing to help with healing. There is no mention of alcohol, withdrawal, or impairment. Patient is discharged home.

Prior to the above ED visits, Mr. Yazzie is diagnosed and undergoes surgical repair of Lisfranc foot fracture on October 6, 2016. Mr. Yazzie is instructed not to bear weight on his foot. The patient is documented in multiple places to be non-compliant with being non-weight bearing. The notes repeatedly identify chronic alcohol use as part of his past medical history.

Patient presented on 7/29/16 with ethanol withdrawal and found to have a mild hand tremor. The patient was given 2 liters of normal saline, 8 mg of ondansetron (an antiemetic), and discharged. Patient has multiple visits for a variety of injuries, back pain, and ankle pain. The patient has a visit of a possible withdrawal seizure on 8/13/15. According to the hospital, Mr. Yazzie was brought in by police. Although the exam did not comment regarding acute withdrawal findings, the patient is discharged with ethanol withdrawal instructions. The patient is found to have an undetectable ethanol level and discharged.

Indian Health Service Records:

Mr. Yazzie had many visits to Indian Health Service (IHS) facilities over the years prior to his death. Mr. Yazzie frequently utilizes the urgent care or ED for back and ankle pain. Mr. Yazzie is also noted to have alcohol abuse going back to at least 2009. Additionally, he has several appointments, for which he does not show.

In the two months prior to his death, Mr. Yazzie was seen for his foot with concern for infection and given antibiotics. He is noted to be non-compliant with being non-weight bearing. On 12/12/16 Mr. Yazzie is described as "smells strongly of EtOH." No further action is taken regarding further evaluation of a blood alcohol concentration or treatment for acute alcohol intoxication. Mr. Yazzie is brought in on 5/25/16 for trauma and was found to have a serum ethanol concentration of 0.377 g/dL. Mr. Yazzie was described as "alert and interactive". "Difficult due to EtOH" is hand written on the doctor's notes and

appears to be related to "EOM" [Extraocular muscle testing]. No testing or medical interventions are ordered for the ethanol level of 0.377 g/dL.

Older IHS records discuss a variety of trauma suffered by Mr. Yazzie. For example, Mr. Yazzie was hit in the face by a 2x4 and presented to the ED on 5/27/16. He was found to have multiple facial fractures and discharged with alcohol intoxication. No alcohol concentration appears to be ordered and no treatment for acute alcohol intoxication was ordered. There are many visits for back pain and left ankle pain. Splints are applied to Mr. Yazzie's foot and notes mention non-compliance with treatment.

Mr. Yazzie declined "HOPE referral", but said he would follow up at Totah Behavioral Health. The notes do not reflect primary health maintenance, such as hypertension and flu-shot care, since January 2014 and before.

Orthopedic Records:

Mr. Yazzie presented with a Lisfranc foot fracture. He was worked up and underwent surgical repair on November 3, 2016. Concern for infection and non-compliance are clearly documented and lead to removal of surgical hardware earlier than planned.

NDPS Final Disposition Report No. 2-17-001125:

The report begins with finding Mr. Yazzie unresponsive. Two correctional officers on duty overnight. A description of Mr. Yazzie in the cell was included.

On pages 6-7 is a difficult to read report with Federal Bureau of Investigation at the top and is an interview of Correctional Officer (CO) Harris. It appears that CO Harris reported police arrived with Mr. Yazzie about 1:15 AM. Mr. Yazzie complained of foot pain. There was some discussion he should be taken to the hospital for his foot, but he was ultimately not taken. The report also notes that Mr. Yazzie denied taking any medications. Mr. Yazzie reportedly was using alcohol for his pain.

On Pages 8-9 CO R. Yazzie is interviewed about Mr. Yazzie. CO R. Yazzie described Mr. Yazzie as being "mouthy" with Officer Franklin. CO R. Yazzie reports complaints about right foot pain and looked at Mr. Yazzie's foot. Seeing his foot being "slightly swollen", Mr. Yazzie is booked. CO R. Yazzie is described as checking on Mr. Yazzie through the night, and Mr. Yazzie is found to be snoring. Mr. Yazzie is found unresponsive around 7:10 in the morning.

According to police officer Gary Franklin's interview on pages 10-11, he responded to a call about 12:30 AM for police to help with a domestic dispute. According to the records, Mr. Yazzie had been drinking and was trying to punch Ernestine Yazzie. Ernestine Yazzie told Officer Franklin that Mr. Yazzie and Mr. Blackie were about to fight. Mr. Blackie was gone by the time police arrived. Police put Mr. Yazzie in their police unit. Mr. Yazzie was transported to jail where he walked in under his own power. Mr. Yazzie reportedly refused to use his crutches, but officers brought them anyway. Mr. Yazzie reports he is not taking his antibiotics and that he is drinking alcohol for pain.

Pages 12-15 are handwritten log of what appears to be every 15 minute checks of the cells. "S3" was noted to be asleep during the night during bed checks. "S3" is documented as "asleep" through 0645 check.

CO Candace Harris written report:

Mr. Yazzie arrived at jail at approximately 0115. Mr. Yazzie was complaining of foot pain. CO Harris reported an assumption that Mr. Yazzie would be taken to medical after booking. She notes at 0645 CO Yazzie did a security check on Mr. Yazzie and "his stomach moved". The report then describes CO Harris as calling EMS when Mr. Yazzie was found unresponsive.

CO Raphael Yazzie written report:

At 0115 Mr. Yazzie was brought in by police to the booking area. Mr. Yazzie walked on his own, but did complain of right foot pain. Mr. Yazzie is described as being "intoxicated" when he is brought in. Mr. Yazzie is also described as "mouthing to officer." CO Yazzie then escorted Mr. Yazzie to his cell where Mr. Yazzie walked on his own and without complaints of foot pain. CO Yazzie notes that throughout the night he did walk by the cells and that the times he checked on Mr. Yazzie in South 3 cell he was snoring loudly. CO Yazzie also notes that at 0640 to 0645, he noticed Mr. Yazzie's stomach rising. There are notes of finding Mr. Yazzie unresponsive about 0710. EMS was then called.

Opinion and rational:

Although Mr. Yazzie is now dead, it should not be lost that he is a person and not a number. Additionally, he is not a disease. Although, I have not met Mr. Yazzie or provided care, I have tried to understand who Mr. Yazzie was as a person, and how he lived with alcohol use disorder. To help with forming my opinion, I rely on the countless stories of patients whom I have cared for with substance use disorder, the scientific literature, and my professional training.

I would like to clarify some terminology. Although there are different types of alcohol, this case is specifically concerned with ethanol or ethyl alcohol. I use ethanol and alcohol interchangeably in this report. There is an important distinction between legal intoxication and clinical intoxication. The law defines legal intoxication as a number from either whole blood ethanol and/or breath testing. The legal limits are derived from car crashes and impairment of healthy volunteers.¹ Clinical intoxication is defined by the World Health Organization (WHO) as "a condition that follows the administration of a psychoactive substance and results in disturbances in the level of consciousness, cognition, perception, judgement, affect, or behavior, or other psychophysiological functions and responses. The disturbances are related to the acute pharmacological effects of, and learned responses to, the substance and resolve with time, with complete recovery, except where tissue damage or other complications have arisen. The term is most commonly used with regard to alcohol use: its equivalent in everyday speech is "drunkenness". Alcohol intoxication is manifested by such signs as facial flushing, slurred speech, unsteady gait, euphoria, increased activity, volubility, disorderly conduct, slowed reactions, impaired judgement and motor incoordination, insensibility, or stupefaction." The WHO goes on to say, "Intoxication is highly dependent on the type and dose of drug and is influenced by an individual's level of tolerance and other factors. Frequently, a drug is taken in order to achieve a desired degree of intoxication. The behavioral expression of a given level of intoxication is strongly influenced by cultural and personal expectations about the effects of the drug."² It is important to understand the WHO does not use a lab value as part of the WHO definition of intoxication. Instead WHO relies on the degree of impairment. WHO's approach to defining impairment based on clinical signs is consistent with most other medical organizations. Unless I specify legal intoxication, my use of the term intoxication refers to clinical intoxication.

Alcohol intoxication follows a progressive spectrum of signs and symptoms progressing to death. As intoxication worsens, so do the physical findings. In people who die from acute alcohol

intoxication, they have progressed past being able to walk and being able to have discussions about their surroundings. People nearing death are comatose and unable to be aroused even in response to pain. In other words, someone does not just stop breathing because they hit a certain blood or serum threshold without other findings. According to family, police, and correctional officers, Mr. Yazzie was described as able to walk independently and acutely refused assistance walking.

Tolerance occurs when the body is regularly exposed to a substance like ethanol. The brain or neuroreceptors undergo several changes making them less sensitive to the effects of ethanol. Based on the information provided, Mr. Yazzie was tolerant to ethanol. Meaning Mr. Yazzie's body functions differently in the presence of ethanol than occasional or non-drinkers. While it is rare for emergency department or urgent care to get an ethanol concentration, when they do, Mr. Yazzie's serum alcohol concentrations are near or higher than the concentrations found on autopsy. During these visits, the medical records describe Mr. Yazzie as being awake, talking, interacting with staff appropriately, and walking. The ED visit on December 31st, 2016 reflects Mr. Yazzie's serum alcohol was 0.417 g/dL, and he was quickly discharged with a serum alcohol concentration higher than when he died. Based on my experience working in about a dozen emergency departments, the time Mr. Yazzie spent in the ED is roughly the time it takes to see a patient, put orders in, draw blood, and get the lab results. Dr. Ketchem did not note any concern for imminent danger with Mr. Yazzie's alcohol concentration of 0.417 g/dL, and Mr. Yazzie was promptly discharged. Dr. Ketchem's decision making is consistent with stand medical practices in the State and nationally.

Over many decades, many researchers and scholars have attempted to correlate blood ethanol levels to levels of intoxication. While there has been some success in naive drinkers, because of tolerance, blood ethanol concentration alone does not reliably correspond to a person's clinical impairment.^{3,4} Even trained medical providers worldwide are not able to reliably determine blood alcohol levels based on impairment.⁵⁻⁷ Reports spanning decades have described high ethanol concentrations in people showing minimal effects.⁸⁻¹⁰ The reason is tolerance. Tolerance explains why a regular drinker is awake and performing tasks with mild to moderate impairment with an alcohol level that could result in death for a naive drinker or child. To illustrate this point, Jones and Harding identified, through the Wisconsin State Laboratory of Hygiene (who perform 85% of the state's DUI alcohol levels), 233 Wisconsin drivers who were found to be operating a motor vehicle with blood alcohol levels over 0.400 g/dL in a four-year period.⁸

Anecdotally, I see patient's with alcohol concentrations over 0.400 g/dL regularly. In my practice, I treat the patient's based on their physician exam. Knowing whether the blood alcohol concentration is 0.200 or 0.600+ does not change my medical management. Additionally, I do not perform repeat or serial alcohol concentrations to determine if the patient is improving. Instead, I rely on my physical exam to determine if the patient is improving. Since the blood alcohol level does not change my clinical decision making in the ED, I do not regularly obtain alcohol levels. In other words, I treat the patient not a number.

The standard of practice is to avoid routine drug and alcohol testing on patients presenting to the ED. The standard of not routinely ordering drug and alcohol testing is seen time and time again with Mr. Yazzie's multiple visits to the urgent care and ED being seen by many different providers. If we did test routinely, at UNM and several other hospitals across the state, serum alcohol concentrations of 0.400 and higher would be seen daily. I suspect Mr. Yazzie would consistently have serum alcohol

concentrations in the range or higher than what was found on autopsy. The standard is to treat a patient and not a number.

In reviewing medical records, Mr. Yazzie suffered from years of severe alcohol use disorder. As the result of frequent heavy drinking, Mr. Yazzie was an elite drinker, and had a much higher tolerance to the acute effects of alcohol than the general population. In other words, Mr. Yazzie was able to tolerate and function with alcohol in his system at very high levels. In review of the medical records, the few times Mr. Yazzie had his serum tested for alcohol, the concentrations were consistently in the range found at the time of his death. Emergency medical intervention was not needed or used by multiple clinicians treating Mr. Yazzie, even when Mr. Yazzie was found to have alcohol concentration levels in the range found at the time of his death. Of particular interest is an ED visit on December 31, 2016, where Mr. Yazzie's serum alcohol was 417 mg/dL or 0.417 g/dL. The treating physician was Dr. Ketchem. In addition to being Boarded in Emergency Medicine, Dr. Ketchem was the Medical Director of the ED at San Juan Regional Medical Center. Dr. Ketchem is also Board Certified in Addiction Medicine and has a senior leadership role in the American College of Emergency Physicians Pain and Addiction Section. Dr. Ketchem has provided testimony to Congress twice on Addiction Issues in Washington. Dr. Ketchem discharged Mr. Yazzie in about 3 hours after presentation, knowing Mr. Yazzie's alcohol was 0.417 g/dL. There were no concerns noted about Mr. Yazzie's alcohol level and no need for any acute interventions.

Mr. Yazzie developed liver and heart disease as a result of years of heavy drinking. These chronic changes from years of heavy drinking, put Mr. Yazzie at a significantly higher risk of death than the general population. When the CDC has looked at alcohol deaths and years of life lost, alcohol results in about 30 years of life loss.^{11,12} New Mexico has among the highest rates of alcohol deaths in the nation. Men are more likely to die than women. In 2004, the CDC broke down the cause of alcohol deaths into acute and chronic causes. Interestingly, only 331 of 40,933 acute deaths were from alcohol poisoning or less than 1% of acute deaths.¹² Most acute deaths were related to trauma, i.e., motor vehicle collisions, suicide, and poisoning where alcohol was not the primary cause. Chronic deaths occurred in 34,833 people. Liver disease, cancer, and heart disease are highlighted. For 2017 fatalities, the CDC describes Native Americans are 4-5 times more likely than the general public to die from causes related to alcohol.¹³ Data from the New Mexico Department of Health is also consistent with alcohol disproportionately affecting men and Native Americans.¹⁴

According to police, Mr. Yazzie's family, and correctional officers, Mr. Yazzie was able to walk, talk, and, although argumentative, able to follow instructions on the morning of January 11, 2017. Mr. Yazzie was moderately intoxicated. Mr. Yazzie was not described as having symptoms of severe intoxication including being comatose, passed out, difficult to arouse, not breathing, cyanotic. When Mr. Yazzie's wife called 911 for help, she requested the police as opposed to an ambulance the morning of Mr. Yazzie's death. In general, people ask for an ambulance, not police when they are concerned a person is seriously intoxicated. Even after police arrived, the family could have asked for an ambulance once police secured the scene, but did not. Like Mr. Yazzie's family, the police and correction officers recognized Mr. Yazzie was not in distress or severely intoxicated. The police report notes that while on scene, Mr. Yazzie left the house and walked on his own to a parked car. Police recognized Mr. Yazzie was supposed to use crutches, but allowed him to refuse.

Based on the available information, had Mr. Yazzie presented to the ED prior to booking, Mr. Yazzie most likely would have been evaluated and quickly discharged from the ED. At the correctional

facility, the question was raised to take Mr. Yazzie into the ED for his foot, not a concern that Mr. Yazzie was severely intoxicated from alcohol. Mr. Yazzie himself admitted that he requested going to the hospital to get out of jail, as opposed for asking for medical care. While I do not know Mr. Yazzie's thoughts, I assume he recognized there were no serious medical conditions associated with his foot and he was at his usual state of alcohol intoxication. The autopsy makes no mention of foot pathology. There were no findings on autopsy of infection, sepsis, gangrene, or other life or limb threatening disease. As previously mentioned, rarely are clinicians ordering serum alcohol concentrations on Mr. Yazzie, and when alcohol concentrations are known, they are generally in the range they were on the morning of Mr. Yazzie's death. **The emergency department would not have predicted Mr. Yazzie's death, and would have considered him safe to be discharged. The ED may have restarted the antibiotic, Mr. Yazzie was described as being non-compliant, but the antibiotic would not have prevented his death.**

Given the facts that: 1) on multiple occasions prior to his death, Mr. Yazzie had survived blood alcohol concentrations higher than what it was when he died, including within two weeks of his death, 2) Mr. Yazzie's level of intoxication did not alarm his family, police, or correctional staff, and 3) death from acute alcohol intoxication is rare and more likely the result of trauma or a combination in an overdose, Mr. Yazzie did not die simply because of acute alcohol intoxication alone. Instead Mr. Yazzie most likely died naturally from chronic drinking or a cardiac dysthymia. At autopsy, there were no findings of airway obstruction, pulmonary embolism, major vascular problem (aneurysm, dissection, bleeding, myocardia infarction, cerebral vascular injury), or traumatic findings capable of causing death. While the toxicological differential diagnosis is extensive, having NMS Lab's expanded panel negative other than alcohol rules out many causes. Clinical timing and history does not support cellular asphyxiates or suicidal etiology. The most common cause of death in the US is heart disease.¹⁵ The medical literature has described chronic drinkers as having higher rates of heart disease including dysthymias or malfunction of the hearts conduction system.¹⁶⁻¹⁸ Mr. Yazzie had changes in his heart and liver consistent with chronic heavy drinking. Since sudden cardiac arrest is very difficult to predict, 80% of people die at home.¹⁹ Currently, the most effective treatment for sudden cardiac arrest is defibrillation and needs to be given within 10 minutes. Defibrillators deliver an electrical shock to the heart in hopes of resetting the normal or survivable electrical activity through the heart. The likelihood of death increases 7-10% for every minute that goes by. Even when a defibrillator is used within 10 minutes, survival is less than 40% under the best of circumstances.²⁰ According to the American Heart Association, in-hospital survival from cardiac arrest survival rate is less than 25%.²⁰ While the emergency department would recognize Mr. Yazzie is at higher risk of death than the general public because of his chronic drinking, the ED could not have predicted Mr. Yazzie death on the night in question. The ED predictably would have cleared him for jail without any acute intervention for acute alcohol intoxication.

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https://cpr.heart.org/AHAEC/CPRAndECC/ResuscitationScience/UCM_477263_AHA-Cardiac-Arrest-%20Statistics.jsp%5BR=301,L,NC%5D. Accessed April 15, 2020.

Attached is an accurate copy of my CV, which includes a list of all publications authored in the previous ten years.

I provided expert witness testimony in the following cases in the last four years: *State of New Mexico v. Lopez*, D-202-CR-2019-00374; *New Mexico v. Zamora and Zuber*; and one Second Judicial District Court case for which I cannot recall the title.

Attached is a copy of my legal fees. I have spent approximately 24 hours preparing this report.

Sincerely,

A handwritten signature in red ink that reads "Brandon J. Warrick". The signature is fluid and cursive, with "Brandon" on the left and "J. Warrick" on the right.

Brandon J. Warrick MD

Brandon J. Warrick

BRANDON J. WARRICK, MD

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EDUCATION

ACEP Leadership Academy	February 2013
Children's Hospital of Michigan Poison Center, Detroit MI	March 2010- February 2012
Medical Toxicology Fellowship Graduation February 29, 2012	
Detroit Receiving Hospital, Detroit MI	June 2011
Hyperbaric Medicine	
Radiation Emergency Assistance Center/Training Site (REAC/TS)	September 2010
Agent of Opportunity for Terrorism	
Radiation Emergency Medicine	
Detroit Receiving Hospital, Detroit MI	July 2005-June 2008
Emergency Medicine Resident	
University of South Dakota School of Medicine, Vermillion SD	August 2001-May 2005
Doctor of Medicine	
South Dakota State University, Brookings SD	Sept 1997-May 2000
BS in Biological Sciences	
Lake Area Technical Institute, Watertown SD	Sept 1996-June 1997
Practical Nursing	

FACULTY APPOINTMENT

Assistant Clinical Professor	May 2014-present
Core Teaching Faculty for Emergency Medicine Residency	
University of New Mexico, School of Medicine & College of Pharmacy	
Albuquerque, NM	
Assistant Clinical Professor	March 2010-May 2014
Wayne State University, School of Medicine	
Emergency Medicine & Medical Toxicology	
Detroit, MI	

Brandon J. Warrick

WORK EXPERIENCE

Associate Medical Director of New Mexico Poison Center New Mexico College of Pharmacy University of New Mexico Albuquerque, NM	May 2014-present
Assistant Clinical Professor Department of Emergency Medicine University of New Mexico Albuquerque, NM	May 2014-present
Attending Physician Department of Emergency Medicine McLaren Greater Lansing Lansing, MI	November 2013-April 2014
Assistant Medical Director Department of Emergency Medicine MidMichigan Medical Center – Gratiot Alma, MI	March 2012-January 2014
Attending Physician Department of Medical Toxicology Department of Emergency Medicine Department of Hyperbaric Medicine Detroit Medical Center Detroit, MI	March 2012-May 2014
Attending Physician Department of Emergency Medicine Henry Ford Brownstown Brownstown, MI	Jan 2009-Feb 2012
Attending Physician Department of Emergency Medicine Henry Ford Wyandotte Wyandotte, MI	July 2008-February 2012
Attending Physician Department of Emergency Medicine St. Joseph Mercy Livingston Hospital Howell, MI	July 2008-July 2009

Brandon J. Warrick

CURRENT PROFESSIONAL MEMBERSHIPS

- American Medical Association 2001 to present
 - American College of Emergency Physicians 2005 to present
 - American College of Medical Toxicology 2010 to present
 - American Academy of Clinical Toxicology 2010 to present
 - American Society of Addiction Medicine 2017 to present
 - New Mexico College of Emergency Physicians 2014 to present
 - New Mexico Society of Addiction Medicine 2017 to present

MEDICAL LICENSURE

AWARDS AND HONORS

- | | |
|--|--------------|
| Top Contributor-American College of Medical Toxicology | March 2019 |
| Top Three Toxicology Articles of 2018-Leon Gussow EM:News | January 2019 |
| Top Volunteer Contributor-American College of Medical Toxicology | March 2018 |
| Top News Release- American Heart Association National Meeting | Nov 2014 |
| Best Poster American Association of Clinical Chemists | July 2012 |

Brandon J. Warrick

American College of Toxicology Fellow Research Award	March 2011
Best Press Ganey satisfaction scores Henry Ford Wyandotte and Henry for Brownstown	December 2009
Graduated With Highest Honors <i>South Dakota State University</i>	May 2000
Eagle Scout	September 1995

SERVICEProfessional

- ACMT Positions and Guideline committee 2012-present
- Recent Graduation Section ACMT-Executive Board 2012-present
- Advance Hazmat Life Support Executive Committee Member 2012-present
- Contributor to American Medical Toxicology Forum 2010-present
- AACT Acute & Intensive Care Section 2015-present
- MidMichigan Medical Center P&T committee 2012-2014
- President-Medical Toxicology Fellow in Training Association 2011-2012
- Executive Board-Medical Toxicology Fellow in Training Association 2010-2012

Community

- DEA High Intensity Work group April 2016 – present
- New Mexico Governor's Advisory Counsel for opioids April 2015 – present
- Health Information Exchange Process Improvements October 2016
- Toxic Chemicals and Latino Health panel member Aug 2015
- Gold King Mine Spill Advisory Committee Aug 2015
- Michigan State Methamphetamine Taskforce 2010-2012
- Embridge Oil Spill collection of epidemiological data 2010
- West Nile Awareness, Rapid City, SD 2005
- Helping Hands, Kathmandu Nepal June and July 2002
- STD/AIDS Awareness, South Dakota High Schools 2001-2002
- Assistant Boy Scout Master, Brookings, SD 1997-2000

Television

- KOB, Albuquerque, NM. FDA, MS, warn of 'Herbal Viagra' use 10/14/2015
- WILX-TV 10, Lansing, MI. "Bath Salts" and New Designer Drug 05/16/2011
- WXYZ-TV 7, Detroit, MI Safety of Energy Drinks 02/14/2011
- West Bloomfield TV, Teens and Drug Trends April-2010

ORIGINAL RESEARCH –PEER REVIEWED

Brandon J. Warrick

Paul M. Wax, Andrew I. Stolbach, Evan S. Schwarz, Brandon J. Warrick, Timothy J. Wiegand, Lewis S. Nelson. ACMT Position Statement: Buprenorphine Administration in the Emergency Department. *Journal of Medical Toxicology*. Online May 13, 2019.

Brandon J. Warrick, Andrew King, Susan Smolinske, Ronald Thomas, and Cynthia Aaron. A 29-year Analysis of Acute Peak Salicylate Concentrations in Fatalities Reported to United States Poison Centers. *Clin Toxicol (Phila)*. 2018 Sept;56(9) 846-851. <https://doi.org/10.1080/15563650.2018.1435887>

Amjad Musleh, Steven A. Seifert, Susan C. Smolinske, Keenan Bora, Christopher Gutierrez, Brandon J. Warrick. Metal Phosphide Ingestions: How the Hospital Became a HAZMAT Incident. *Journal of Emergency Medicine*. Published on-line December 26, 2017 doi.org/10.1016/j.ajem.2017.12.058

Brandon J. Warrick, Anita Paula Tataru, Roy Gerona. New Psychoactive Substances in Pediatric Patients. *The Pediatric Clinics of North America*. 2017 Dec;6: 1223–1241. doi.org/10.1016/j.pcl.2017.08.003.

Ted Lee, Brandon J. Warrick, Preeyaporn Sarangarm, Robert L. Alunday, Silas Bussmann, Susan C. Smolinske, Steven A. Seifert. Authors' response to letter on "levetiracetam in toxic seizures". *Clin Toxicol (Phila)*. 2017 Nov 27:27 DOI: 10.1080/15563650.2017.1406097

Michael J. Moss, Brandon J. Warrick, Lewis S. Nelson, Charles A. McKay, Pierre-André Dubé, Sophie Gosselin, Robert B. Palmer, Andrew I. Stolbach. ACMT and AACT Position Statement: Preventing Occupational Fentanyl and Fentanyl Analog Exposure to Emergency Responders. *Clin Toxicol (Phila)*. 2017 Sep 5:1-4. doi: 10.1080/15563650.2017.1373782.

Michael J. Moss, Brandon J. Warrick, Lewis S. Nelson, Charles A. McKay, Pierre-André Dubé, Sophie Gosselin, Robert B. Palmer, Andrew I. Stolbach. ACMT and AACT Position Statement: Preventing Occupational Fentanyl and Fentanyl Analog Exposure to Emergency Responders. *J Med Toxicol*. 2017 Aug 25. doi: 10.1007/s13181-017-0628-2.

Ted Lee, Brandon J. Warrick, Preeyaporn Sarangarm, Robert L. Alunday, Silas Bussmann, Susan C. Smolinske & Steven A. Seifert. Levetiracetam in toxic seizures. *Clin Toxicol (Phila)*. 2017 Jul 28:1-7. doi: 10.1080/15563650.2017.1355056. [Epub ahead of print]

Aly M. Mohamed, Anisah Adnan, Steven A. Seifert, Susan C. Smolinske, Daniel Castresana, Gulshan Parasher & Brandon J. Warrick. An endoscopic end to coma. *Toxicology Communications*. 2017 June;1(1):6-9.

Brandon J. Warrick

Anita Paula Tataru, Brandon J. Warrick, and Susan Smolinske. In response: A systematic analysis of methylene blue for drug-induced shock. Clinical Toxicology. Published On-line 11 Jan 2017.

Brandon J. Warrick, Anita Paula Tataru, and Susan Smolinske. A systematic analysis of methylene blue for drug-induced shock. Clinical Toxicology. 2016 Aug;54(7):547-55.

Andrew Stolbach, Jeffrey Brent, Peter Chase, Howard Geller, Ronald Kirchner, Thomas Kurt, Charles McKay, Sean Rhyee, Silas Smith, Brandon Warrick. ACMT Position Statement: Guidance for the Use of Intravenous Lipid Emulsion. J Med Toxicol. 2016 Apr 27. [Epub ahead of print]. PMID: 27121236

Andrew Stolbach, Jeffrey Brent, Peter Chase, Howard Geller, Ronald Kirchner, Thomas Kurt, Charles McKay, Sean Rhyee, Silas Smith, Brandon Warrick. Position Statement: Duration of Intravenous Acetylcysteine Therapy Following Acetaminophen Overdose. Journal of Medical Toxicology. 2016 Mar 8. [Epub ahead of print]. PMID: 26957510.

Andrew Stolbach, Jeffrey Brent, Peter Chase, Howard Geller, Ronald Kirchner, Thomas Kurt, Charles McKay, Sean Rhyee, Silas Smith, Brandon Warrick. ACMT Position Statement: Safety Issues Regarding Prescription Fentanyl Products. J Med Toxicol. 2016 Feb 4. [Epub ahead of print]. PMID: 26847376

Andrew Stolbach, Jeffrey Brent, Peter Chase, Howard Geller, Ronald Kirchner, Thomas Kurt, Charles McKay, Sean Rhyee, Silas Smith, Brandon Warrick. Safety Issues Regarding Prescription Opioids. J Med Toxicol. 2016 Mar;12(1):142-4. PMID: 26732680.

Andrew Stolbach, Jeffrey Brent, Peter Chase, Howard Geller, Ronald Kirchner, Thomas Kurt, Charles McKay, Sean Rhyee, Silas Smith, Brandon Warrick. ACMT Position Statement: The Use of Methadone as an Analgesic. J Med Toxicol. 2016 Jan 8. [Epub ahead of print]. PMID: 26746475

Brandon J. Warrick, Leslie V. Boyer and Steven A. Seifert. Non-Native (Exotic) Snake Envenomations in the U.S., 2005–2011 *Toxin*, 2014, 6, 2899-2911.

Brandon J. Warrick, Meredith Hill, Kimberly Hekman, Rachelle Mallet, Robert Goetz, Marcel Casavant, Michael Wahl, James J. Mowry, Henry Spiller, Deborah Anderson, Albert Alegas, David Gummin, Ron Thomas, Christopher Nezlek, Susan Smolinske. A Nine State Analysis of Designer Stimulant, “Bath Salt”, Hospital Visits Reported to Poison Control Centers *Annals of Emergency Medicine*, Sep;62(3):244-51.

Sara J. Vagi, Sophia Sheikh, Monica Brackney, Susan Smolinske, Brandon Warrick, Lydia Baltarowich, Nicholas Reuter, Joshua Schier

Brandon J. Warrick

Passive Multi-State Surveillance of Moderate or Severe Neutropenia following Use of Cocaine or Heroin contaminated with Levamisole

Annals of Emergency Medicine, 2013 Apr;61(4):468-74.

Brandon J. Warrick, MD, John Wilson, PhD, Matthew Hedge, MD, Scott Freeman, MD, Karen Leonard, and Cynthia Aaron, MD.

Lethal Serotonin Syndrome After Methylone and Butylone Ingestion

Journal of Medical Toxicology, 2012 Mar;8(1):65-8

Fred Benzie, MPH, MPA, Kimberly Hekman, MPH, Lorraine Cameron, PhD, David R. Wade, PhD, Corinne Miller, PhD, Susan Smolinske, PharmD, Brandon Warrick, MD. Emergency Department Visits After Use of a Drug Sold as “Bath Salts” — Michigan, November 13, 2010–March 31, 2011

Morbidity and Mortality Weekly. May 18, 2011 Vol. 60.

AWARDED GRANTS

Project Title: Medical Cannabis in New Mexico: The Patient Provider-Dispensary Interface
 Funding Organization: University of New Mexico-Resource Allocations Committee
 Project Period: 7/2018-6/2019
 Role: Co-Investigator
 Description: Identify factors that influence the medical marijuana ‘prescription’ decision. Using qualitative research methods, we are conducting interviews of three groups: 1) patients; 2) cannabis technicians and CEOs/business-owners of medical marijuana dispensaries; and 3) primary care providers of medical marijuana (MMj) patients.

Project Title: A Multidisciplinary Approach to Risk Stratify of Opioid Deaths in New Mexico.

Principal investigator: Brandon J. Warrick and Susan Smolinske.
 Funding Organization: National Center for Research Resources and the National Center for Advancing Translational Sciences of the National Institutes of Health
 Grant Number: 1UL1TR001449.
 Start & Stop Dates: 4/2016-3/2017
 Funding amount: \$10,400 for the period 4-1-2016 through 3-31-2017.
 Description: A multidiscipline collaboration between law enforcement, NM Health Department, Office of the Medical Examiner, and the NM Board of Pharmacy to better risk stratify opioid fatalities. Particular emphasis on the development of software code able to combine databases with over 97.5% accuracy.

Brandon J. Warrick

Project Title:	Poison Control Stabilization and Enhancement Program
Principal investigator:	Susan Smolinske
Percent Effort:	10%
Funding Organization:	Health Resources and Services Administration
Start & Stop Dates:	9/18 – 8/19
Amount Awarded:	\$115,158

Project Title:	Poison Control Stabilization and Enhancement Program
Principal investigator:	Susan Smolinske
Percent Effort:	10%
Funding Organization:	Health Resources and Services Administration
Start & Stop Dates:	9/17 – 8/18
Amount Awarded:	\$115,158

Project Title:	Poison Control Stabilization and Enhancement Program
Principal investigator:	Susan Smolinske
Percent Effort:	10%
Funding Organization:	Health Resources and Services Administration
Start & Stop Dates:	9/16 – 8/17
Amount Awarded:	\$115,158

Project Title:	Poison Control Stabilization and Enhancement Program
Principal investigator:	Susan Smolinske
Percent Effort:	10%
Funding Organization:	Health Resources and Services Administration
Start & Stop Dates:	9/15 – 8/16
Amount Awarded:	\$115,158

Project Title:	Poison Control Stabilization and Enhancement Program
Principal investigator:	Susan Smolinske
Percent Effort:	10%
Funding Organization:	Health Resources and Services Administration
Start & Stop Dates:	9/14 – 8/15
Amount Awarded:	\$115,158

ORIGINAL RESEARCH –NON-PEER REVIEWED

HOW PATIENTS DECIDE WHAT MEDICAL CANNABIS PRODUCTS TO USE FOR CHRONIC PAIN: THE PATIENT-DISPENSARY-DOCTOR INTERFACE

How patients decide what medical cannabis products to use for chronic pain: the patient-dispensary-doctor interface. Robert L. Rhyne Ben Daitz, Danelle Callan, Andrew L. Sussman, Kara McKinney, Cynthia Sanchez, Rachel Franklin, Christina Hoff, Brandon J. Warrick, Mayra Perez.

The 2nd International Annual Congress on Controversies on Cannabis-Based Medicine.

Brandon J. Warrick

Barcelona Spain. May 2019.

Delays, interruptions, and adverse reactions with IV acetylcysteine administration using traditional, 3-bag dosing.

Susan C Smolinske, Steven A. Seifert, Brandon J. Warrick

European Association of Poisons Centres and Clinical Toxicologists (EAPCCT)
Naples, Italy May 2019

Attitudes in a high risk population regarding a naloxone autoinjector capable of detecting acute overdose. Robert L. Rhyne, Ben Daitz, Danelle Callan, Andrew L. Sussman, Angelica Solares, Kara McKinney, Cynthia Sanchez, Rachel Franklin, Christina Hoff, Brandon J. Warrick, William Rayburn. Adaptive CPD: Impact of Medical Marijuana on Pain and Opioids Cohort Trial (IMMPACT study).

2019 Society of Academic CME
Charleston, SC. February 2019

Alexandra Goslow, Daniel Barkhuff, Peter A Zink, Brandon J Warrick, Silas Bussmann, and Justin T Baca

North American Association of Clinical Toxicologists
Chicago, IL October 2018

Massive elemental mercury ingestion; Addicted to glitter

LaDonna Bonnin, Brandon J Warrick, Stephen A. Seifert, Christopher Wilson, and Susan Smolinske.

North American Association of Clinical Toxicologists
Chicago, IL October 2018

Criminal conviction histories in heroin verses prescription overdose fatalities

Brandon Warrick, Orrin B. Myers, Steven Seifert, and Susan Smolinske

North American Association of Clinical Toxicologists
Vancouver, BC Canada, October 2017

Arsenic at breakfast, lunch and dinner

Steven A. Seifert, Brandon J. Warrick and Susan C. Smolinske

European Association of Poison Control Center and Clinical Toxicologists
Basil, Switzerland May 2017

Case Report: A Relaxing Cup of Poppy Seed Tea Goes Toxic

Ginger Rinner, Chelsea C. White, Susan C. Smolinske

and Brandon J. Warrick

European Association of Poison Control Center and Clinical Toxicologists
Basil, Switzerland May 2017

Criminal Conviction Histories in Opioid Overdose Fatalities in New Mexico Brandon J. Warrick, Linda Freeman, Orrin B. Myers, Steven A. Seifert, Sarah L. Lathrop, and Susan Smolinske.

Brandon J. Warrick

American Society of Criminology
New Orleans, LA November 2016

Levetracetam in Toxic Seizures
Ted Lee, Brandon J. Warrick, Preeyaporn Sarangarm, Robert L. Alunday, Silas Bussmann, Susan C. Smolinske, and Steven A. Seifert
North America Congress of Clinical Toxicology
Boston, MA September 2016

High Flux Dialysis With Endoscopic Removal of Carbamazepine Bezoar In The Treatment of a Massive Ingestion of Immediate Release Carbamazepine
Anisah Adnan, Steven A. Seifert, Susan C. Smolinske, Aly M. Mohamed, Gulshan Parasher, Daniel Castresana, Brandon J. Warrick
North America Congress of Clinical Toxicology
Boston, MA September 2016

Four Corners Coordinated Poison Center Role in Animas River Contamination
Susan C Smolinske, Brandon J. Warrick, Steven A. Seifert, Miriam Wamsley, Keith Boesen, Shireen Banerji, Sharyn Welch, Barbara Crouch.
North America Congress of Clinical Toxicology
Boston, MA September 2016

Prescription Opioid Abuse or Misuse in Pregnancy Using Poison Center Data Brandon Warrick, K. Sycamore, B. D. Holbrook, Susan Smolinske, Steven Seifert, Gabrielle Bau, B. Bucher Bartelson, S. G. Severtson, J. L. Green & R. C. Dart
North America Congress of Clinical Toxicology
Boston, MA September 2016

Probable Green Tobacco Sickness from Occupational Preparation of E-Cigarette Products
Daniel G Marrow, Steven A. Seifert, Brandon J. Warrick, Edward O Irobi, Geri Jaramillo, Susan C Smolinske.
North America Congress of Clinical Toxicology
San Francisco, CA 2015

Energy Drink Exposures in the National Poison Data System: Epidemiology and Clinical Effects
Steven A Seifert, Kristopher L Arheart, Vivian I Franco, Alvin C Bronstein, Stacy D Fisher, Brandon J Warrick, Sara M Seifert, and Steven E Lipshultz.
American Heart Association
Platform Presentation with Media Release
Chicago, IL 2014

Brandon J. Warrick and Keenan Bora
Turning the ICU into a HAZMAT Incident- Communication Breakdown on a Toxic Patient

Brandon J. Warrick

North America Congress of Clinical Toxicology
Poster Presentation
Atlanta, GA 2013

Brandon J. Warrick and Lydia Baltarowich
Ibogaine for Opioid Addiction: A Deadly Treatment
North America Congress of Clinical Toxicology
Poster presentation
Las Vegas, NV 2012

Sara J Vagi, Sophia Sheikh, Monica Brackney, Susan Smolinske, Brandon Warrick,
Nicholas Reuter, Joshua G Schier
Passive Multi-state Surveillance for Levamisole-associated Neutropenia in Cocaine or
Heroin Users
North America Congress of Clinical Toxicology
Platform presentation
Las Vegas, NV

John Wilson, PhD, Brandon J. Warrick, MD, and Karen Leonard 2012
Analysis of Commercial "Bath Salts" Blends by GC/MS
American Association of Clinical Chemists
Award-Best Poster
Los Angeles, CA

Nine State Analysis of Hospital Reported "Bath Salts" Exposures 2011
North America Congress of Clinical Toxicology
Poster presentation
Washington D.C.

A Case Series of Lead Poisoning in Adopted Chinese Infants 2011
North America Congress of Clinical Toxicology
Poster presentation
Washington D.C.

Brandon J. Warrick and Robert Sherwin
The Prevalence and Value of Hyperlactatemia in CHF Patients Presenting to an
Urban Emergency Department
Poster Presentation at SAEM and EMRAM Spring 2008

Ying Fang, Brandon Warrick, Ann Sperlich, Raymond R. R. Rowland, and David Benfield
Sequence Requirement for Nucleolar Localization of PRRS Virus Nucleocapsid
VIIIth International Symposium on Nidoviruses
Platform Presentation
Pocono, PA Summer 2000.

Brandon J. Warrick

Brandon J. Warrick, Raymond R. R. Rowland
 Nucleocapsid (N) Protein of the Porcine Reproductive and Respiratory Syndrome Virus
 (PSSRV) Localizes to the Nucleus Via Active Transport
 Poster Presentation at South Dakota State Research Forum.
 Pierre, SD Spring 2000.

Acknowledgement of Peer-Reviewed Publications

David D. Gummin, James B. Mowry, Daniel A. Spyker, Daniel E. Brooks, Michael O. Fraser & William Banner (2017) 2016 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 34th Annual Report, *Clinical Toxicology*, 55:10, 1072-1254, doi:10.1080/15563650.2017.1388087.

American College of Medical Toxicology. ACMT Recommends Against Use of Post-Chelator Challenge Urinary Metal Testing. *J. Med. Toxicol.* (2017) 13: 352. doi.org/10.1007/s13181-017-0624-6.

Lynn A. Farrugia, Sean H. Rhyee, Diane P. Calello, Sharan L. Campleman, Anne M. Riederer, Hannah R. Malashock, Anthony Pizon, Timothy Wiegand, Paul M. Wax, Jeffrey Brent, On behalf of the Toxicology Investigators Consortium Study Group. The Toxicology Investigators Consortium Case Registry—the 2016 Experience. *J Med Toxicol.* 2017 Sep;13(3):203-226. doi: 10.1007/s13181-017-0627-3.

2015 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 33th Annual Report.
Clinical Toxicology, December 2016, 54 924-1109.

2014 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 32th Annual Report.
Clinical Toxicology, December 2015, 53 962-1172.

2013 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 31th Annual Report.
Clinical Toxicology, December 2014, 52 1032-1283.

2011 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 29th Annual Report.
Clinical Toxicology, December 2012, 50 911–1164.

2010 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 28th Annual Report.
Clinical Toxicology, 2011, 49, 910-941

Book Chapters

Brandon J. Warrick

Miguel Fernandez and Brandon J. Warrick. Hydrazines. Advanced Hazmat Life Support 5th Edition. University of Arizona. 2017.

Steven A. Seifert and Brandon J. Warrick. Immunotoxicology. In Critical Care Toxicology: the Diagnosis and Management of the Critically Poisoned Patient, 2e. Brent J, Burkhardt K, Dargan P, Hatten B, Megarban B, Palmer R, Eds. Springer International Publishing, Denver, 2016.

Brandon J. Warrick. Synthetic Cathinones. ToxED, Elsevier. May 27, 2015.

Miguel Fernandez and Brandon J. Warrick. Hydrazines. Advanced Hazmat Life Support 4th Edition. University of Arizona. 2014.

INVITED LECTURES/PRESENTATIONS

International/National meetings

Royal Canadian Mounted Police September 2018

New Psychoactive Substances
Health risks handling ultra-potent opioids
Oral Presentation
Ottawa, Ontario

United States Probation Office for the District of New Mexico July 2018

National Drug Lab Conference
Drug testing in the new psychoactive substance era
Oral Presentation
Albuquerque, NM

Government of Canada-Privy Council February 2018

First responder Personal Protective Equipment with fenamyls
Oral Presentation
Ottawa, Ontario

Medical Toxicology LLSA Review October 2017

North American Congress of Clinical Toxicology
Oral Presentation
Vancouver, British Columbia

Medical Toxicology LLSA Review October 2015

North American Congress of Clinical Toxicology
Oral Presentation
San Francisco, CA

The Michigan Oil Spill: A Tale of Toxicology and Public Health March 2011

Brandon J. Warrick

American College of Medical Toxicology
 Slide presentation
 Clear Water Beach, FL

Misdiagnosis of Neuroleptic Malignant Syndrome March 2011
 American College of Medical Toxicology
 Slide presentation
 Clear Water Beach, FL

State/Regional Meetings

Personal Protective Equipment for Investigating Counterfeit Pill Facilities Sept 11, 2017
 High Intensity Drug Trafficking Area
 Albuquerque, NM

The Manufacturing of Counterfeit Pills: A Business Approach & Personal Protective Equipment for Investigating Counterfeit Pill Facilities Aug 18, 2017
 New Mexico Board of Pharmacy-Board Meeting
 Albuquerque, NM

Trends in Counterfeit Pill Market June 5, 2017
 High Intensity Drug Trafficking Area
 Albuquerque, NM

Loperamide abuse - counterfeit pills – Project update April 21, 2017
 New Mexico Board of Pharmacy-Board Meeting
 Albuquerque, NM

Next Generation of Designer Drugs May 1, 2015
 2015 Pediatric Updates
 Presbyterian Hospital
 Albuquerque, NM

Epidemic of the Abuse of Recreational Designer Drugs March 2012
 Michigan Epidemiology Conference
 Plenary Speaker
 Lansing, MI

Local/Regional Meetings

Opioids and the Evolving Epidemic Feb 26, 2017
 Lincoln County Medical Center Mid-Winter Symposium
 Ruidoso, NM

Want to Get High “Legally”? Feb 21, 2016

Brandon J. Warrick

Lincoln County Medical Center Mid-Winter Symposium
Ruidoso, NM

It's Not Your Mother's Poison Center	Feb 21, 2016
Lincoln County Medical Center Mid-Winter Symposium Ruidoso, NM	
Navajo Nation EMS	October 2015
Intro to toxicology and Pre-hospital envenomation	
Metal Toxicities in the Motor City	January 2012
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation	
New Drugs of Abuse for a New Millennium	January 2011
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation and printed syllabus	
Weapons of Mass Destruction-the Biological Agents	September 2011
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation and printed syllabus	
"Bath Salts" a Health Concern and the Next Designer Drug	February 2011
South East Michigan Department of Community Health Slide presentation	
Toxicology of Energy Drinks	January 2011
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation and printed syllabus	
Libby Zion and MAOI Toxicology	April 2011
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation and printed syllabus	
Bupropion Toxicology	April 2011
South East Michigan Quarterly Toxicology Grand Rounds Slide presentation and printed syllabus	

Invited Seminars and Grand Rounds

Want to get High "Legally"?	November 2018
Grand Rounds UNM Pediatrics, Psychiatry, and EM/Trauma	
The Evolving Opioid Epidemic	Aug 31, 2017
SBIRT-All Staff Meeting Santa Fe, NM	

Brandon J. Warrick

Gallup Indian Medical Center Designer drugs and Snake envenomation	October 2015
"Bath Salts" and the Next Generation of Designer Drugs Mid-Michigan Grand Rounds MidMichigan Hospital, Midland, MI	December 2013
An Update for the Management of Acetaminophen Toxicity Mid-Michigan Grand Rounds MidMichigan Hospital, Midland, MI	November 2013
Management of Acetaminophen Ingestions Emergency Medicine Grand Rounds Henry Ford Macomb, Clinton Township, MI	2011
Management of Salicylate Intoxication Emergency Medicine Grand Rounds Henry Ford Macomb, Clinton Township, MI	2011
Pitfalls in Treating Aspirin Toxicity Internal Medicine and Emergency Medicine Grand Rounds Wayne State University Slide presentation	December 2010
Organophosphates Occupational Medicine Wayne State University	2010-2012
MAOI Overdosed Patient and ICU Management ICU Grand Rounds, Wayne State University Slide presentation	2010
Introduction to the Overdosed Patient in the ICU ICU Grand Rounds, Wayne State University Slide presentation	2010
When Bradycardia and Hypotension Occur Emergency Medicine Grand Rounds, Henry Ford Wyandotte Hospital Slide presentation	2009
ST-Elevation in conditions other than MI Emergency Medicine Grand Rounds, St. Joseph Hospital Slide presentation and handouts	2008
Acute CVA in the ED	2008

Brandon J. Warrick

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Central Lines Indications and Complications 2007

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Diagnosis and Treatment of Monoarticular Joint Pain 2007

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

ED Management of Status Epilepticus 2007

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Brugada's Syndrome 2006

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Wrist Injuries 2006

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Therapeutic Hypothermia: Back to the Ice Age 2006

Emergency Medicine Grand Rounds, Detroit Receiving Hospital
Slide presentation

Recurrent Teaching Lectures

- Introduction to Toxicology
- It's Not your Grandma's Poison Center. The Scope of Our Role.
- The Evolving Opioid Epidemic
- New Psychoactive Compounds: Cannabinoids, Cathinones, and Opioids
- Radiation Emergencies
- Aspirin Toxicity
- Acetaminophen Toxicity
- Envenomations
- Toxins of the Electron Transport Chain
- Neuroleptic Malignant Syndrome and Extrapyramidal Effects
- The Toxic ECG
- Opioids and Prescribing Consideration
- Hazmat
- Chemical Disasters for the Emergency Provider
- Serotonin Syndrome
- Pesticides
- Cholinesterase Inhibitors

Brandon J. Warrick

- Antimuscarinics toxicity
- Toxic Alcohols and Glycols
- Homopathic Considerations in Medicine
- Acid/Base Disturbances
- Cardiovascular Toxins
- Metal Toxicity